

## TRAINING OVERVIEW

# DFIR370-Host Intrusion Methodology and Investigation

## Syllabus

### Training facilities

#### Los Angeles, CA (Pasadena, CA)

1055 East Colorado Boulevard  
Suite 400  
Pasadena, CA 91106-2375

#### Washington, DC (Gaithersburg, MD)

9711 Washingtonian Blvd  
6th floor, Room 601 (Paris Room)  
Gaithersburg, MD 20878

#### London, UK (Reading)

420 Thames Valley Park Drive  
Earley, Reading  
Berkshire  
RG6 1PT

For a complete listing of locations, including Authorized Training Partners around the world, please visit

[opentext.com/learning-services/learning-paths](https://opentext.com/learning-services/learning-paths)

[EnCaseTraining@opentext.com](mailto:EnCaseTraining@opentext.com)

### Day 1

After a course introduction and an orientation of the virtual workspace used throughout the week, day one instruction dives right into material on reconnaissance and browser exploits.

Students will learn about various types of reconnaissance and the use of honey networks. Next, students will examine the structure of a cyberattack, then create and launch their own web browser exploit.

Instruction follows with an explanation of best practices in the development and implementation of a triage plan. After that, instruction focuses on creating and maintaining a thorough methodology for analysis.

#### The main areas covered on day one include:

- Introduction to host intrusion investigations
- The lifecycle of a cyber attack
- Working with a virtual workspace
- Understanding reconnaissance methods and utilizing them against the victim computers
- Developing a comprehensive methodology for analyzing an intrusion
- Setting up and weaponizing a browser exploit
- Conducting a dynamic analysis
- Infecting a machine and establishing persistence

### Day 2

Instruction on day two begins with instruction on the varying methods attackers use to hide evidence of their activities and how to identify them.

Students will participate in practical exercises throughout the day, reinforcing the day's activities. The day ends with the beginning of a practical exercise.

#### The main areas covered on day two include:

- How to triage a live host while referencing multiple strategy models and the host intrusion methodology
- Understanding tactical readiness and determining risk tolerance and the operational impact of an incident response
- Establishing a triage protocol
- Understanding and using common volatile and disk-based artifacts used during investigations to the best advantage
- Using the methods of hiding data, as well as locating and identifying various hidden data

- Understanding phishing techniques, including methods of luring, stealing login credentials, sending malicious attachments and how to manually send phishing emails through terminal commands

## Day 3

Day three begins with the continuation of the previous day's practical exercise. Instruction continues with a demonstration of methods to collect volatile data, network data and live registry items. Next, students will learn about malware infections involving a malicious remote administration tool.

Students will participate in the investigation triad, which consists of memory and packet capture analysis, as well as log file review. Day three ends with the completion of another extensive practical exercise.

### The main areas covered on day three include:

- Conducting a malware infection and discussing packet capture and log file collection techniques
- Analyzing memory artifacts affected by intrusions
- Analyzing packet capture network artifacts and event logs to determine the extent of intrusions

## Day 4

Day four begins with a lesson on analyzing malware. A practical exercise will challenge students to analyze captured volatile data to determine the story behind a compromised system.

The course ends with a lesson on the various methods used to enhance a hacker's status on a computer or network.

### The main areas covered on day four include:

- Analyzing log files created during a malware infection
- Using various programs to parse and investigate event logs
- Conducting basic analysis of malware and volatile data related to successful intrusions
- Escalating a hacker's privilege on a system and analyzing the compromise